



# ***Workshop on Alternative Fuels (biofuels and ammonia), Power Solutions for Shipping and Ports***

## **Context of the work on the safe use of battery systems in maritime applications**

### **2.1 Safety & Security**

19th October 2022

- European Commission and Members States identified the need to address the matter.
- Scope for harmonization – relevance to EMSA's work
- EMSA intends draw-up a non-mandatory Guidance (perhaps on the model of the AFV carriage Guidance) on the Safety of onboard battery systems
- A Group of Experts (GoE) was established to this end
- To date around 80 experts from industry and administrations did register to assist in the development of the Guidance.
- The work is organized through consultation rounds and online monthly short meetings to review the results of the consultations.
- Round 1 is open till 27<sup>th</sup> October 2022.

Main relevant issues for the first consultation round:

- Overall 'Regulatory' Approach
- Scope and Application
- Main Functions of the BESS
- Boundaries
- Role of Risk Assessment and Alternative Design
- Preliminary Structure

1. General – Introduction, Definitions, Scope and Application, etc.
2. Battery Energy Storage Systems (BESS)
  1. BESS description and boundaries
  2. Energy Management System
  3. Testing
3. Battery systems onboard arrangements
  1. Space(s) for battery system – fire safety, ventilation, electrical arrangements
  2. Other battery support spaces
  3. Alarms and indicators
  4. Testing
4. Operations and training
  1. Operational procedures – normal, emergency, maintenance
  2. Training
5. Additional provisions by mode of operation (*e.g. full electric, hybrid, emergency, ancillary, etc.*)
6. Safety assessment

Steps that we intend to follow for the definition of the technical content of the Guidance

## **Step 1 - Hazards Identification**

Identifying the most relevant hazards specific to a certain domain (e.g. ventilation, fire fighting, etc).

## **Step 2 - Goal**

Laying down the overall goal(s) for the domain at stake.

## **Step 3 – Functional Requirements**

Draw-up the technical functional requirements addressing hazards and fulfilling the goal – may include testing.

## **Step 4 – Performance Requirements**

Draw-up the technical requirements fulfilling the FR – includes testing.

Phase 1

Phase 2

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1<sup>st</sup> Consultation survey at:

<https://ec.europa.eu/eusurvey/runner/EMSARound1BESS>

**The survey runs from 28<sup>th</sup> September until 27<sup>th</sup> October**

You can:

- Save contribution as draft in EU Survey and continue later (right side of page)
- Download the proposed ToC in the last page

Don't forget to click

A blue rectangular button with the word 'Submit' in white, sans-serif font.

!

Any problems w/ the survey: [Monica.RAMALHO@emsa.europa.eu](mailto:Monica.RAMALHO@emsa.europa.eu)

## Timeline

Timeframe	Milestone
May '22	Call for experts across MS and members of the PSS EG
June '22	Informal meeting
October '22	Official kick-off (presential meeting) for the Group of Experts ( <b>1<sup>st</sup> meeting</b> )
October '22	After the KO, <b>2<sup>nd</sup> meeting</b> (online) of the Group of Experts
October '22	<b>1<sup>st</sup> round</b> of correspondence launched
Mid-November '22	After MSC.106, <b>3<sup>rd</sup> meeting</b> (on-line) of the Group of Experts
Mid-November '22	<b>2<sup>nd</sup> round</b> of correspondence launched
February '23	<b>3<sup>rd</sup> round</b> of correspondence launched
March – April '23	<b>Consolidation</b> of the work
May – June '23	Possible <b>Workshop</b> before completion





...Thank you!

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